

Claims

1. A method comprising:

stocking a predetermined number of sets of foot orthotics, each set having a standard arch height that is unique for that set;

measuring an arch height of a sole of a foot; and

selecting an orthotic from the set for which the standard arch height most closely matches the measured arch height.

2. The method of claim 1 wherein the predetermined number equals three.

3. The method of claim 1 wherein the measuring step includes determining the arch height from a footprint of the sole.

4. The method of claim 3 wherein the footprint is a thermal image of the sole.

5. The method of claim 1 wherein the orthotics can be heat-softened and the method further comprises the step, after the selecting step, of pressing the sole against the selected orthotic while the selected orthotic is installed in a shoe in a heat-softened state.

6. A method comprising:

engaging a sole of a foot against a thermal imaging device that yields a thermal image of the sole; and

determining a characteristic of the sole based on the thermal image.

7. The method of claim 6 wherein the characteristic is an arch height of the sole.

8. The method of claim 6 wherein the imaging device includes a thermally sensitive material that exhibits a change in color with a change in temperature.

9. The method of claim 8 wherein the thermally sensitive material is a liquid-crystal-based.

10. The method of claim 8 wherein the foot is colder than the thermally sensitive material during the engaging step.

11. The method of claim 9 wherein the foot is warmer than the thermally sensitive material during the engaging step.
12. The method of claim 11 further comprising the step, before the engaging step, of warming the foot with a warming device.
13. The method of claim 6 wherein the imaging device is in the form of a plate configured to lie flat on the ground, and the engaging step includes stepping on the device.
14. The method of claim 6 wherein the imaging device yields a thermal image of the sole based on the difference in temperature between the sole and the device.
15. The method of claim 6 wherein the thermal image indicates pressure points of the sole.
16. The method of claim 6 wherein the thermal image indicates restricted blood flow locations of the sole.
17. A foot orthotic comprising:
 - an upper layer formed of a viscoelastic material;
 - a middle layer formed of a thermoplastic material; and
 - a lower layer formed of a thermoset material;
 - the layers being adhered together, and the orthotic being configured to be removably installed in a shoe.
18. The orthotic of claim 17 wherein the thermoplastic material has a softening temperature of about 55-80°C, whereby the orthotic can be pressed by a foot while the middle layer is in a heat-softened state during a custom-molding process but will not heat-soften during normal use.

19. A foot orthotic comprising:
 - an upper layer formed of a viscoelastic material;
 - a middle layer formed of a thermoplastic material with a softening temperature of about 55-80°C, whereby the orthotic can be pressed by a foot while the middle layer is in a heat-softened state during a custom-molding process but will not heat-soften during normal use; and
 - a lower layer formed of a material that will not heat-soften below about 90°C, whereby the lower layer will not heat-soften during the custom-molding process;
- the layers being adhered together, and the orthotic being configured to be removably installed in a shoe.
20. The orthotic of claim 19 wherein the middle layer is stiffer than the upper and lower layers.
21. The orthotic of claim 19 further comprising a fabric layer, overlying the upper layer, that contains elemental silver configured to kill bacteria.
22. The orthotic of claim 19 further comprising a flat section and an upturned section, the lower layer approximately corresponding to the shape of the flat section.